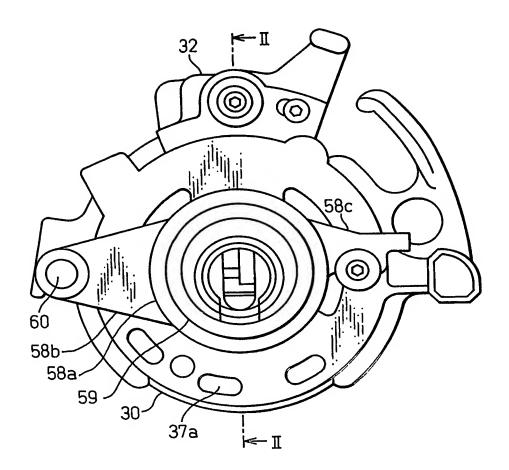
$\frac{1}{13}$ 

Fig.1



 $\frac{2}{13}$ 

Fig.2

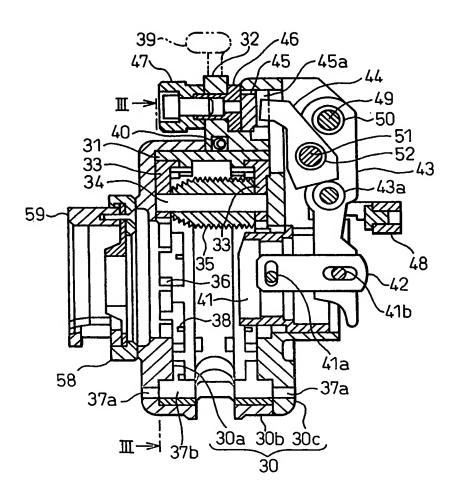


Fig.3

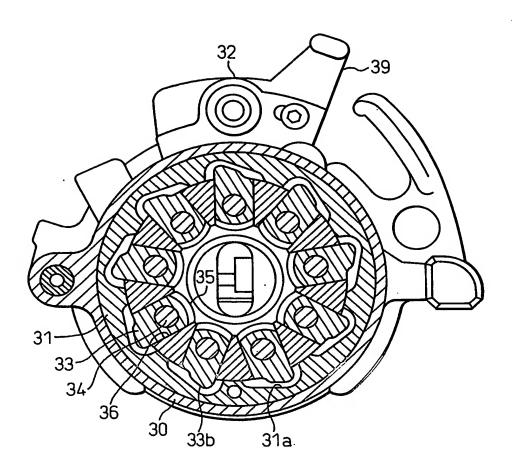


Fig.4

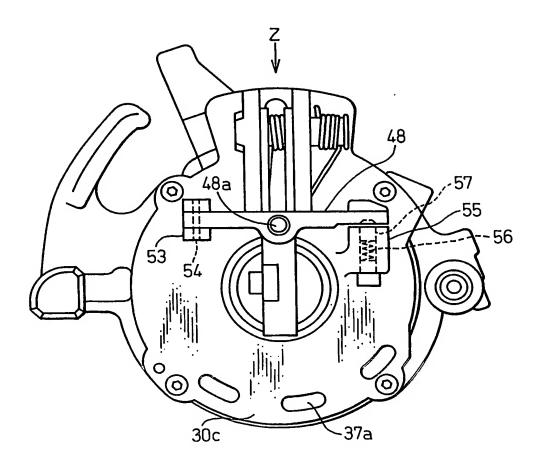


Fig.5

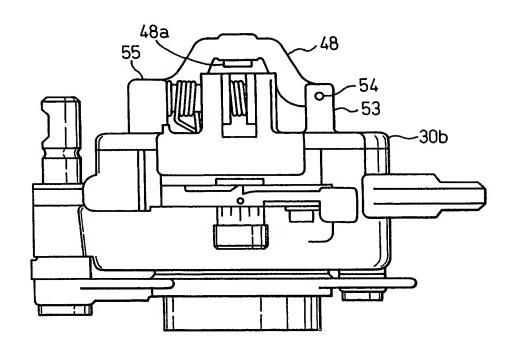


Fig.6

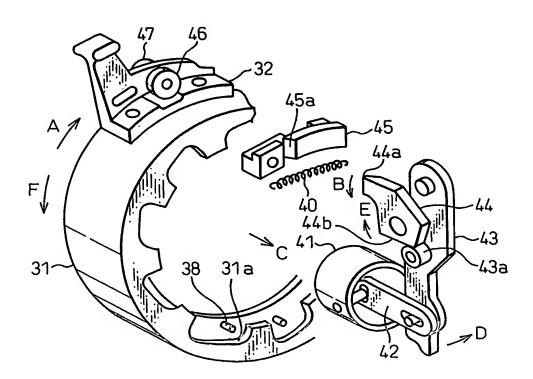
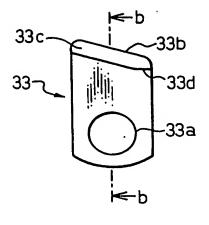
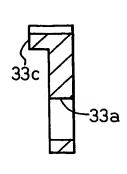


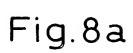


Fig.7a

Fig.7b







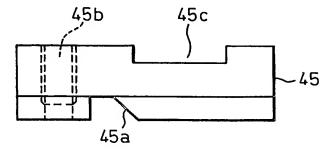


Fig.8b

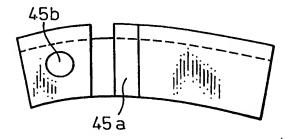




Fig.9a Fig.9b

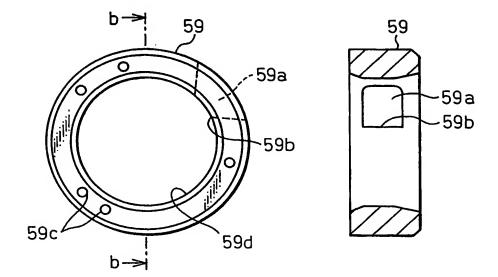
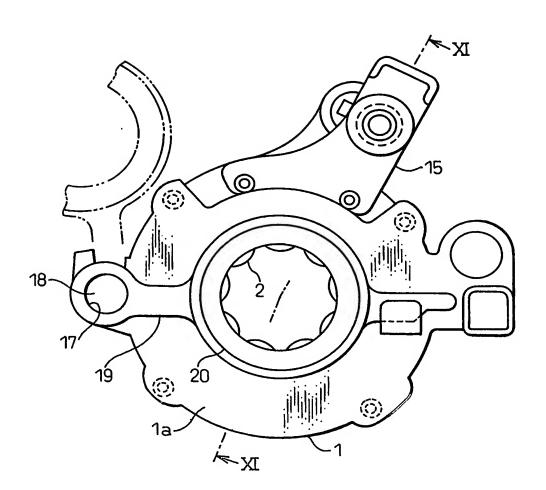


Fig.10 PRIOR ART



10<sub>/13</sub>

Fig.11
PRIOR ART

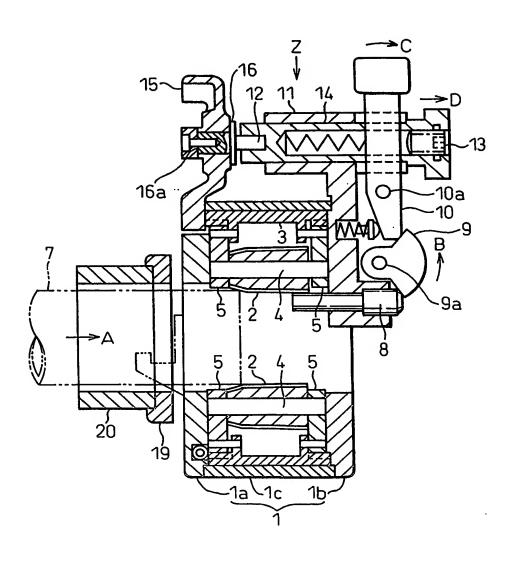
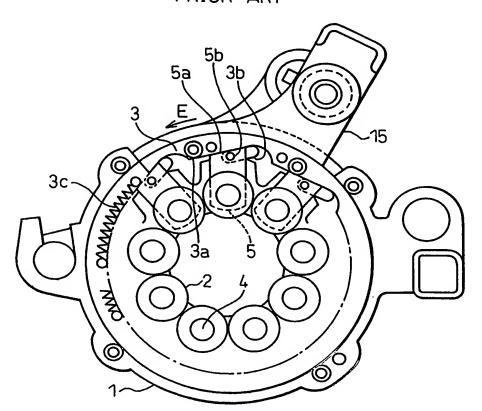


Fig.12
PRIOR ART



List of Reference Number

30...housing

30a...front closure

30b...intermediate part

30c...rear closure

31...cam ring

31a...cam oblique surface

32...setting block

33...shaft bearing plate

33a...shaft bearing hole

33b...oblique surface of shaft bearing plate

33c...projection

33d...surface in parallel with width direction

34...roller shaft

35...thread rolling roller

36...guide groove

37a,37b...foreign matter discharge hole

38,41a...pin

39...lever

40,50,52,56...spring

41...abutment member

41b...bolt

42...link

43...first lever

43a...roller

44...second lever

44a...front end of second lever

44b...lower surface of second lever

45...cam member

45a...cam oblique surface

45b...threaded hole

45c...groove

46...eccentric cam

47...thread diameter adjusting knob

48...buffer arm

48a...elastic member

49,51...support shaft

- 13/13 -

53,55...boss

54...hinge pin

57...shutter pin

58...scraper holder

58a...holder part

58b,58c...arm

59...scraper

59a...angle hole

59b...cutting blade

59c...threaded hole

59d...inner diameter part for guiding to-be-rolled pipe

60...shaft